

U.S. Patent Application Serial No. 09/736,317  
Amendment filed November 24, 2004  
Reply to OA dated July 29, 2004

**AMENDMENTS TO THE ABSTRACT:**

Delete the current abstract and replace therewith the attached substitute abstract.

The geometric texture and the graininess of an output image are improved in half tone processing using an error diffusion method. An image processing method where half tone processing is performed on input images using an error diffusion method including ~~comprising steps of~~ generating a sine wave where the amplitude and the frequency are modulated according to the average value of the target pixel value and the peripheral pixel values, adding the diffused quantization errors, the target pixel value and the sine wave, quantizing the addition result by a predetermined number of grayscale levels, and calculating the quantization errors of the peripheral pixels from the errors by quantization. By applying a disturbance sine wave by the error diffusion method, diffusion errors can be uniformly dispersed, and geometric texture and graininess can be improved.

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